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Klamath Field Office
1312 Fairlane Road
Yreka, CA 96097

Tel. 916/842-5763

April 20, 1989

TO: Management Council Members

FROM: Ron Iverson

SUBJECT: Draft Notes for April 6, 1879 1989 meeting

Enclosed are the draft notes for the Management Council meeting of April 6, ~~1988~~ 1989 held at Portland, Oregon.

DRAFT

KLAMATH FISHERY MANAGEMENT COUNCIL

NOTES ON THE MEETING HELD 6 APRIL 1989

IN PORTLAND, OREGON

The meeting was called to order by Chairman Fullerton at 7:30 p.m. Frank Warrens, the new Klamath Council representative of the Pacific Fishery Management Council, was introduced. Meeting attendance is displayed in Attachment 1.

Correction/approval of minutes and agenda

Minutes of the previous meeting, and agenda for this meeting (Attachment 2), were approved. Bob Hayden provided some information pertaining to the ocean harvesters' meeting held February 23 in Eureka. This information, together with other additions to minutes of previous meetings, is contained in Attachment 3.

Report of the Technical Advisory Team (Boley)

(1) Catch/effort as an abundance indicator The Tech Team found a high degree of correlation between estimated stock abundance and CPUE for the May/June/Fort Bragg time/area management cells, but they do not recommend use of this statistic as an abundance indicator for the 1989 season...a possibility for 1990.

(2) Alpha parameter analysis The Team considered whether to recalculate this statistic, which represents the productivity of a population - i.e. numbers of surviving progeny per parent - in the absence of density-dependent factors, for Klamath fall chinook salmon. This will be done after partitioning of the modeled population into natural, hatchery smolt, and hatchery yearling components. Results will be reported to KFMC next fall.

(3) Tech Team meeting schedule Next meeting will probably occur in June or July.

(4) Biological implications of optimum yield (OY) management for Klamath fall chinook have been analyzed by the Tech Team and can be provided to the Council later in the meeting.

Council discussion of management options to recommend to PFMC

Jim Martin summarized the process for management of 1989 ocean chinook fisheries:

o At the March 5-6 meeting, KFMC developed five options covering a wide range of allocations and harvest rates for Klamath chinook. Those were provided to PFMC.

o PFMC circulated, for public comment, four options for Klamath chinook management.

o This week, PFMC has narrowed the range to two options, now being analyzed by the Salmon Tech Team (STT). These are: Option A, with ocean harvest rate of .46 for age 4 Klamath chinook, and Option D, with ocean harvest rate of .375 (Attachment 3). Either option would yield substantially less catch south of Cape Falcon than observed in 1988, partly because estimated stock size is less. Option D greatly reduces troll catch in the Klamath Management Zone (KMZ), and also reduces coastwide coho catch by reducing southerly fisheries. Both options would produce sufficient Klamath chinook spawning escapement to satisfy "maximum sustainable yield" (MSY) requirements, but only option D would maintain inriver fisheries at 1988 levels.

o Oregon Department of Fish and Wildlife proposed a variant of Option A (Attachment 3) in which the projected ocean escapement i.e. escapement to the Klamath River of 151,000 chinook would be harvested at a level not less than that of 1988, leaving a spawning escapement of 85,000 - nearly 20,000 fish less than the PFMC Framework Plan would call for. Such a deviation from the .35 escapement rate goal would require an emergency regulation by the Secretary of Commerce. A justification to persuade the Secretary, prepared by ODFW staff, would have to show that the reduced escapement would not detract from restoration of the stock, and would yield positive socioeconomic effects.

o There is little hope of an emergency regulation being approved without KFMC endorsement, and Jim urged that this be provided.

Discussion of Martin's comments included the following:

o Q: Why does Option D produce an ocean escapement of only about 15,000 chinook more than Option A, given that constraints on ocean harvest are much more severe for D?

A: Because ocean fisheries are for mixed stocks, a reduction in Klamath impacts of 15,000 fish requires reduction in ocean harvest of several times that amount.

Q: If you add up all the closures, there are 11 weekly blocks north and south of the KMZ combined for D, against only 8 for A, yet this doesn't seem to reduce catches in those areas. Why?

A: Week-long closures are much less than half as effective as two-week closures, but the longer closures have been avoided because of adverse effects on markets for troll-caught chinook.

o (Bingham):We trollers participated in developing Option A, but STT analysis of A showed that it doesn't yield enough fish to provided economically viable fisheries in all areas. We feel the quota of 42,000 chinook (excluding special fisheries) in the KMZ is too small to support a viable fishery, and the 20-chinook trip limit makes KMZ fishing unattractive for trip boats. We prefer to see the KMZ completely closed, and the KMZ quota distributed to outside areas. We don't want any area fishing under quotas.

o (Masten): With appropriate dampeners, the 42,000 fish could provide a fair season of fishing, especially to local day boats.

o (Bingham): The day boat fleet is mostly gone from California KMZ ports...driven out by lean years. A day boat fleet may remain in Brookings.

o (Masten): We agree with the Oregon proposal of a one-year reduction in spawning escapement to 85,000...and wish to point out that this benefits the ocean fishery, because it reduces the ocean escapement required to maintain the inriver fishery at the 1988 level...am concerned that the spawning escapement reduction may be perceived as a transfer of fish to the inriver harvest.

o (Marshall): We support the Oregon version of Option A because it meets the test of providing minimum needs of all, including the KMZ troll industry and ports. The PCFFA proposal to close the KMZ is completely contrary to socioeconomic objectives I thought we had agreed to. We want the local KMZ ports and boats to have a harvest share. Next year we will begin to get returns of 3s and 4s from large spawning escapements, which may produce more of a KMZ fishery.

o (Fullerton): Are supporters of the Oregon proposal saying that the proposed emergency regulation would have socioeconomic benefits in the KMZ as well as inriver? Answer is yes.

o (Wilkerson): I don't know whether Option A provides a viable KMZ fishery...am waiting for number refinement from the STT...I don't endorse closure of the KMZ.

o (Naylor): CDFG position remains that inriver fisheries should not be decreased below the level of last year.

o (Martin): PFMC economic analysis (Attachment 3) clearly shows that Option A provides more benefits to the ocean fishery than does Option D...and far more benefit in the KMZ. The increased benefit derives from greater projected chinook and coho catches, bought with a relatively small decrease in Klamath ocean escapement. Coastwide, Option A provides projected catches of 32,000 chinook and 50,000 coho greater than catch projections for Option D...and economic benefits about $1.9 million ex-vessel greater than D.

o (Bostwick): Nat, given these economic benefits, I don't see how you can describe the projected KMZ fishery under Option A as "token".

o (Warrens): The typical non-treaty troll chinook catch for the entire Oregon/Washington ocean fishery north of Cape Falcon is about the size of the KMZ chinook catch projected under Option A. Nat, why do you feel this fishery is nonviable?

o (Bingham): The 20 - chinook trip limit makes KMZ fishing inefficient...we don't expect much harvest of coho for boats fishing from the Eureka area. Fishing time projected for the KMZ is very small - note the closure throughout July - and Option A reduces fishing time in outside areas by four weeks below 1988..

o (Reed): Nat, I understand you to say that the STT, in projecting allowable days of fishing in the KMZ, assumed unrealistically high harvest rates.

o (Bingham): Correct. It appears they assumed the high harvest rates of early-season fishing would continue throughout the season, and set closures accordingly.

After a caucus break to consider new information on economic impacts of the two management options, Nat reported Option A is still unacceptable to the California troll industry. Elements of the Oregon modification of A that are acceptable include the level of inriver harvest and reduced inriver escapement...but proposed ocean management, especially the KMZ quota and trip limits, and reduced fishing time outside, are unacceptable. Nat proposed a compromise involving reduced fishing in outside ocean areas coupled with further reduction in spawning escapement.

Martin responded he could not support further reduction in spawning escapement...Oregon would be willing to discuss further dampening of the Coos Bay ocean fishery, to be balanced with cuts in the Fort Bragg fishery to provide more KMZ harvest. Klamath impacts of southern fisheries are so large that some of the fishing reduction must occur there. Jim also said he was willing to negotiate the shaping of the KMZ fishery, so long as total projected ocean harvest is not changed.

Bob Hayden observed that the differences in projected ocean harvests being debated here are probably not statistically significant differences, given the low confidence in these projections.

Responding to the PCFFA proposal for seasonal management in the KMZ, Charley Fullerton said that Department of Commerce would be concerned about runaway fisheries like the June 1988 KMZ fishery, and any seasonal management proposal would have to demonstrate how these would be dampened.

Following another caucus, Jim Martin proposed that KFMC take the following points of agreement to PFMC,as a recommendation for PFMC action:

o Develop an ocean fishery management regime that yields a projected ocean escapement to Klamath River of 151,000 chinook.

o Propose an emergency regulation that will permit allocation of the ocean escapement into 85,000 spawning escapement and 66,000 inriver harvest.

o Impose balanced harvest constraints north and south of the KMZ to provide a viable KMZ fishery.

o Emphasize seasonal management in the KMZ, with harvest constraints to prevent a runaway fishery.

Jim said that it should be sufficient for the Klamath Council to agree on these generalities. Specifics of how to manage to acheive these objectives

could be left to the STT and PFMC. Jim formalized his proposal as a motion, which was seconded. Discussion of the motion included the following:

- (Fullerton): Do I understand that the motion is not tied to any one of the four PFMC options? A: Correct.

- This motion gets us to the essence of the agreement we thought we had on Option A, which fell apart over specific harvest projections and dampeners.

- Concerned that the motion contains nothing that would change the unsatisfactory features of Option A.

- Concerned about the many and rapid changes in proposals from ODFW...we need some idea of what Martin's proposal would mean in terms of harvests and constraints.

- In voting on this motion, the Klamath Council is working in a one-year time frame...no long-term agreements implied.

- If the motion leads to a need for more predictive modeling, that could be a problem at this late hour.

- Motion is too general...doesn't give PFMC enough guidance

Following a caucus, Nat Bingham proposed an amendment that would add specific management recommendations to the motion. Before these could be discussed in detail, Jim Martin responded he would not support such an amendment.

The Bingham amendment was rejected by vote of the Council, with several negative votes cast.

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The Martin motion was rejected by vote of the Council, with one negative vote cast.

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The meeting was adjourned at about 12:10 a.m. on April 7.

POSTSCRIPT

On April 7, PFMC discussed Options A and D for ocean salmon management, including the "Oregon" modification to A that would reduce Klamath spawning escapement to 85,000. The Salmon Technical Team (STT) presented biological and economic arguments in opposition to the Oregon option (Attachment 4). Mr. Fullerton commented that, given the lack of biological or socioeconomic arguments to support an emergency regulation reducing the Klamath escapement rate goal below the MSY level, he felt the Secretary of Commerce would reject such a proposal by PFMC. Since PFMC submits its recommendations as a package, this would negate all proposed management regulations coastwide, leaving it to the Secretary of Commerce to set regulations without PFMC recommendations. This interpretation was concurred in by PFMC counsel D'Ancona. Following this

discussion, a motion to adopt the Oregon modification of Option A was defeated by vote of PFMC.

Subsequently, a motion was introduced by Mr. Bontadelli for a complex management option developed by CDFG staff that would yield a projected Klamath ocean escapement of 156,000. If 102,000 of these were identified for spawning escapement, 54,000 would be available for inriver harvest, and MSY would be satisfied. It was pointed out that the projected level of inriver harvest is inconsistent with the Klamath Council recommendation to hold inriver harvest at or above the 1988 level. Response to this was that there may be more fish available than projected. This argument was rebutted on the basis of lack of scientific evidence. After a caucus, the Bontadelli motion was withdrawn.

Next, Mr Fullerton moved to modify Option D by imposing sufficient harvest constraints north and south of the KMZ to provide a KMZ harvest of 30,000 chinook. In discussion, it was explained that the motion was intended to apply from Point Arena to Cape Arago. PFMC sent the motion to the STT for impact analysis, which was provided 15 minutes before the adjournment target of 5 p.m. Management measures proposed by the STT to meet objectives of the Fullerton motion are shown in Attachment 5. After discussion and recalculation of impacts, Fullerton's motion passed.

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ATTACHMENT 1

KLAMATH FISHERY MANAGEMENT COUNCIL

Attendance Roster, April 6, 1989 meeting, Portland, Oregon.

Management Council Members

Nat Bingham	California Commercial salmon fishing industry
Virginia Bostwick	In-river sport fishing community
E.C. Fullerton	National Marine Fisheries Service
Robert Hayden	Offshore recreational fishing industry
Lyle Marshall	Hoopa Indian Tribe
James Martin	Oregon Department of Fish and Wildlife
Susan Masten	Non-Hoopa Indians residing in Klamath area
E.A. "Spike" Naylor	California Department of Fish and Game
Lisle Reed	Department of Interior
Frank Warrens	Pacific Fishery Management Council
Keith Wilkinson	Oregon commercial salmon fishing industry

Others Attending

Richard Miller
Jim Johnson
Ronnie Pierce
Jerry Thomas
John Voglek
Peter Lawson
Del Robinson

ATTACHMENT 2

KLAMATH FISHERY MANAGEMENT COUNCIL

MEETING AGENDA

6 April 1989

6:30 p.m.	Call to order
6:40	Correction and approval of agenda, and of minutes of meeting of 22 February 1989
6:50	Report of the Technical Advisory Team (Boley) on options promulgated by PFMC for 1989 management of ocean chinook salmon fisheries
7:30	Break
7:45	Report on status of the PFMC process (Schwarz)
8:15	Council discussion and action on selection of a management option to propose to PFMC
8:45	Public comment
9:15	Other old business, new business
9:30	Discussion of next meeting
9:45	Adjourn

IVERSON

ATTACHMENT 3

from Mr Ugles
7 April 89
1045 a.m.

Table __. Troll Option "A" proposed for 1989 ocean salmon fisheries.

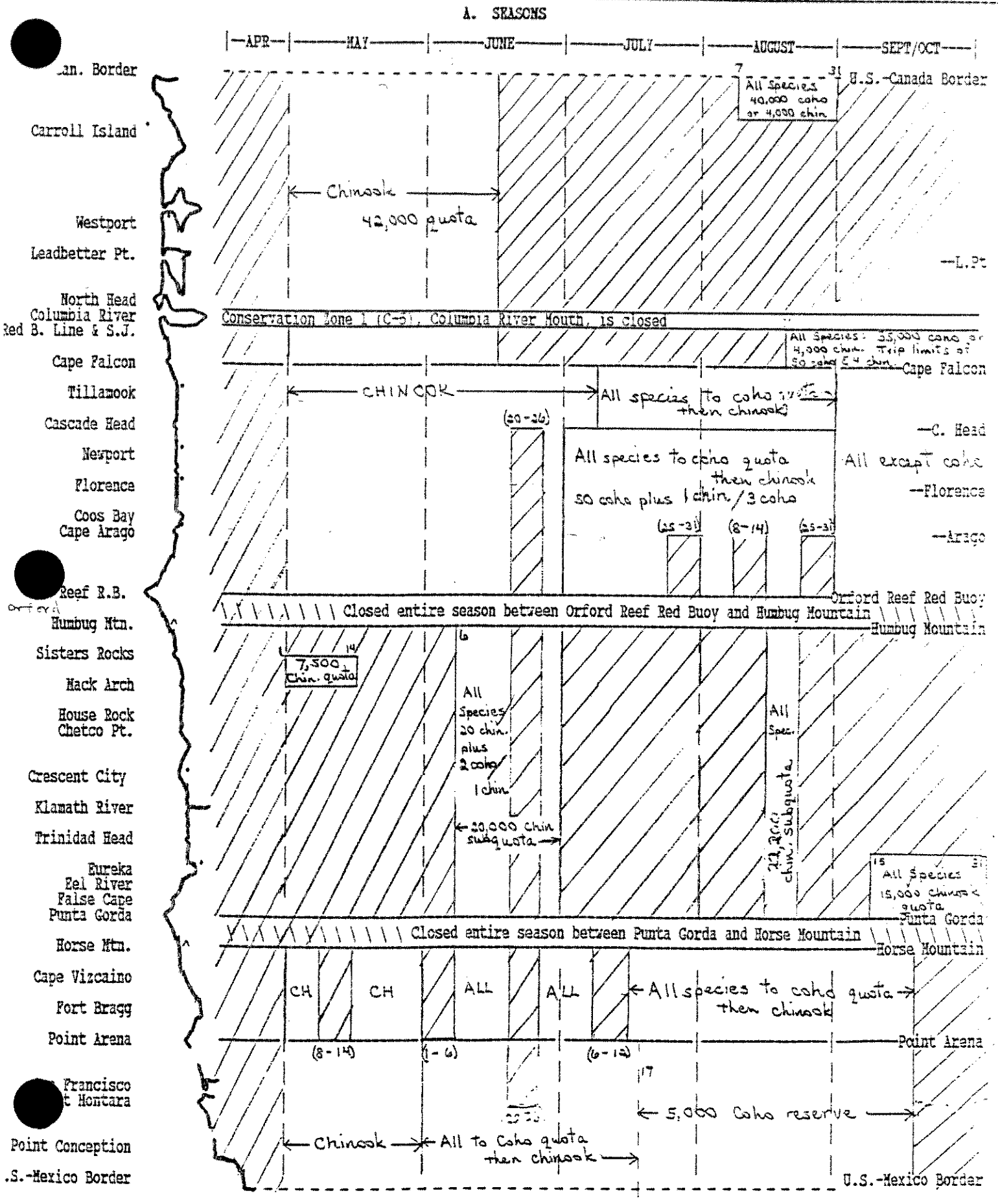

Table 2. Troll Option D" proposed for 1989 ocean salmon fisheries.

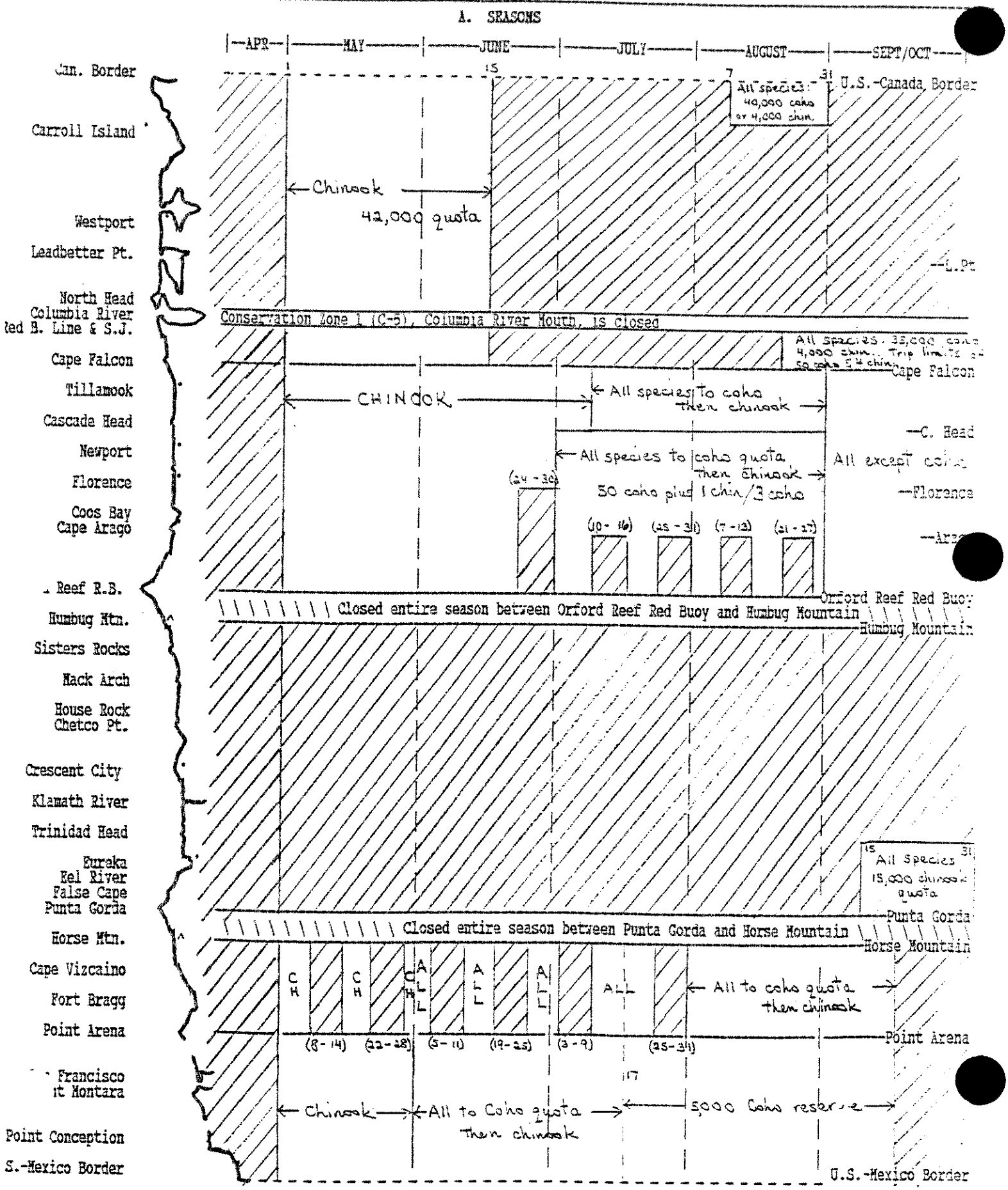

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Table 5. PRELIMINARY Impacts of 1989 Management Options on Oregon and California chinook fisheries and escapement compared with 1988 observations (thousands of fish).

	OPTION A''		OPTION D''	
Ocean Harvest Rate a/	(.460)		(.375)	
AREA AND FISHERY	OCEAN HARVEST			1988 Observed
OREGON-WASHINGTON				
North of Cape Falcon				
Treaty Troll	55.0		55.0	32
Nontreaty Troll	50.0		50.0	74.8
Sport	50.0		50.0	19.5
TOTAL	155.0		155.0	126.3
OREGON				
Cape Falcon to Orford Reef Red Buoy				
Troll	286.4		287.4	428.6
Sport	16.1		16.1	16.1
TOTAL	302.5		303.5	444.7
KLAMATH MANAGEMENT ZONE				
Orford Reef Red Buoy to Horse Mtn.				
Troll	64.7		15.0	114.8
Sport	28.9		28.9	53.2
TOTAL	93.6		43.9	168.0
CALIFORNIA				
South of Horse Mtn.				
Troll	774.6		791.8	1,222.0
Sport	139.8		139.8	139.8
TOTAL	914.4		931.6	1,361.8
TOTAL SOUTH OF CAPE FALCON				
Troll	1,125.7		1,094.2	1,765.4
Sport	184.8		184.8	209.1
TOTAL	1,310.5		1,279.0	1,974.5

STOCK	OCEAN ESCAPEMENT (ADULTS)			1988 Observed	Spawning Escpt Goal
COLUMBIA RIVER					
Upper River Brights	231.1		231.1	336.1	40.0
Lower River Hatchery Tules	94.8		94.8	298.2	37.4
Spring Creek Hatchery Tules	20.4		20.4	12.3	8.2
Upper River Springs	90.3		90.3	97.0	115.0
Upper River Summers	31.1		31.1	31.3	80-90
Klamath Fall Chinook					
Ocean Escapement	151.0	151.0	165.9	181.1	
Inriver Catch	47.0	66.0	67.6		
Inriver Harvest Rate a/	(.310)	(.440)	(.490)		
Spawning Escapement	104.0	85.0	98.3		
Spawning Escapement (goal)	104.0	104.0	98.3		See Table
Sacramento b/	185.1	185.1	179.8	212.8	122-180

a/ For age 4 Klamath fall chinook.
b/ Spawning escapement.

D27@27G

Table E-1. Estimated economic impacts of proposed troll fishery regulatory options.

AREA		EXPECTED CATCHES a/ CHINOOK	EXPECTED CATCHES a/ COHO	EX-VESSEL VALUE	PERSONAL INCOME IMPACTS 1988	PERSONAL INCOME IMPACTS 1989	% CHANGE
North of Cape Falcon b/	Option A*	~~51,448~~ 48,000	~~152,000~~ 75,000	~~$2,896,681~~ 3.9mm	$2,596,600	~~$5,492,073~~	~ ~~112%~~ SO
	Option D*	~~51,448~~ 48,000	~~152,000~~ 75,000	~~$2,896,681~~ 3.9mm	$2,596,600	~~$5,492,073~~	~ ~~112%~~ SO
Cape Falcon to Port Orford Reef Buoy c/	Option A*	283,449	403,800	$12,928,520	$36,265,200	$24,272,670	-33%
	Option D*	283,862	430,100	$13,257,235 -1.3mm	$36,265,200	$24,881,902	-31%
Port Orford Reef Buoy to Horse Mountain	Option A*	64,695	45,500	$2,411,932	$7,536,600	$4,210,984	-44%
	Option D*	15,000	0	$430,007	$7,536,600	$746,928	-90%
South of Horse Mountain	Option A*	774,572	27,300	$22,502,742	$84,746,900	$48,606,894	-43%
	Option D*	791,797	22,500	$22,948,080	$84,746,900	$50,119,553	-41%
SOUTH OF CAPE FALCON d/	Option A*	1,122,716	476,600	$37,843,194		$77,090,548	
	Option D*	1,090,659	452,600	$36,635,322		$75,748,384	
Option A* minus D*		32,057	24,000	$1,207,872		$1,342,164	
Percent Change D* to A*		3%	5%	3%		2%	

a/ All expected catches are based on an analysis of the impacts of the proposed regulations on historical use patterns. North of Cape Falcon expected catches are assumed to be equal to the catch quota.

b/ It is assumed that all chinook and coho quotas will be caught. No pink fishery impacts are included. For every 10,000 pink salmon caught, $ 35,800 of income impacts in coastal areas may be expected (based on 1987 average prices and weights).

As with many salmon fisheries, setting seasons in the ocean implies an allocation of fish between inside and outside fishermen. When allocating fish to the ocean fishery requires higher hooking mortality than would occur in an inside fishery, the increased hooking mortality may be considered as a payment being made in order to allocate fish to the ocean fishery. In many cases a ratio fishery increases the hooking mortality thus increasing the cost allocating to the ocean.

If the fish are caught in a 5 pink to 1 coho ratio, a 5 pink to 1 coho ratio regulation will result in hooking mortality because coho may have to be discarded until sufficient numbers of pinks are caught. If fish are caught in smaller ratios, hooking mortality costs of making the allocation increase.

c/ In contrast to Preseason Report II, these numbers do not include an expected rollover from the sport to troll fishery.

d/ Losses from future harvest of KMZ stocks in future years should be considered in determining the full costs of Option A*.

COMMENTS RE: REDUCING THE NATURAL SPAWNING ESCAPEMENT LEVELS OF KLAMATH FALL CHINOOK FROM 81,000 TO 66,300 in 1989.

1. The Klamath escapement policy established by the 9th framework plan amendment is based on brood year exploitation rates. Since chinook mature at more than a single age, the policy must be implemented over a multi-year period. Under the framework plan amendment, the management policy represented by Option A'' would likely create "yo-yo" harvest rates in future years for fisheries impacting Klamath fall chinook. The brood year escapement rate is largely determined over a 2-year period by the return of 3 and 4 year old fish. Option A'' does not meet the escapement rate established by the 9th framework plan amendment. The escapement rate for the 1985 brood year would fall below the 33%-34% range and would increase the harvest rate of age 3 fish above the level normally expected. Therefore, if the 3 year olds of the 1986 brood are overfished in 1989, the only way that the management regime established by the 9th framework plan amendment could possibly be preserved for the 1986 brood year would be to substantially reduce fisheries impacts on 4 year old Klamath fall chinook in 1990. This in turn would likely require the harvest rates on 4 year old Klamath fall chinook to be increased in 1991, again overharvesting the 3 year old fish. Which in turn...

2. Option D'' is consistent with the escapement rate established by the 9th framework plan amendment.

3. The harvest rate plan established in the 9th framework amendment was initiated, in large part, because of uncertainty in the capacity of the Klamath basin for adult chinook spawners. The need was expressed to achieve "high" spawning escapement levels, relative to those observed through 1985, in order to test the productivity of the basin. The harvest rate plan allowed a fixed percentage of each brood year to escape and spawn, consistent with the biological parameters of the stock. In high abundance years, the "cost" of achieving high escapement levels, to provide scientific information to evaluate the productivity of the basin, would be very low, as compared to achieving high escapement levels in years of low abundance. The adverse impacts on ocean and inriver fisheries would also be minimized. Reducing potentially high spawning escapements by deviating from the harvest rate plan when abundance is relatively high can only extend the period of time that will be required to determine the appropriate spawning escapement goal for the Klamath River basin. The STT feels very strongly that 22% higher the spawning escapement resulting from option D'' compared to option A'' would be of significant value in evaluating the productivity of Klamath fall chinook.

4. The anticipated chinook harvest by ocean fisheries south of Cape Falcon is 31,500 fish greater under option A'' than under option D''. This amount represents 2% of the total anticipated 1989 chinook catch south of Cape Falcon under option A'' and is very small relative to historic variations in annual catch levels (figure 1).

5. The economic analysis supporting the 9th framework amendment showed that the harvest rate policy for Klamath fall chinook produced greater economic benefits and stability for fisheries over the long term than a fixed escapement goal policy. Adoption of option A'' would be contradictory to this economic justification.

6. Production resulting from the 1989 escapement would likely be reduced. For ocean fisheries, although the number of fish involved may be small relative to the total number of fish available to ocean fisheries, this reduced production could require increased restrictions for fisheries both inside and outside the KMZ to meet the escapement rate established under the 9th framework amendment. Potential future losses in production would most seriously impact inriver fisheries.

7. It is highly unlikely that the exploitation rate associated with option A'' could be sustained over time. If over exploitation continues in the future, production of Klamath fall chinook would be expected to spiral downwards over the long term.

8. The question has been asked of the STT, "Is the 33%-34% brood year escapement rate based on hatchery fish?" The answer is "no", it is based on naturally spawning fish (hatchery fish could withstand a much higher harvest rate). The question has also been asked, "Can the ocean or inriver fisheries selectively harvest hatchery fish?" We are not aware of any techniques which could be employed in the ocean or inriver fisheries to selectively harvest the hatchery component. Because of this, the 33%-34% brood year escapement rate must be achieved for both hatchery and naturally spawning fish.

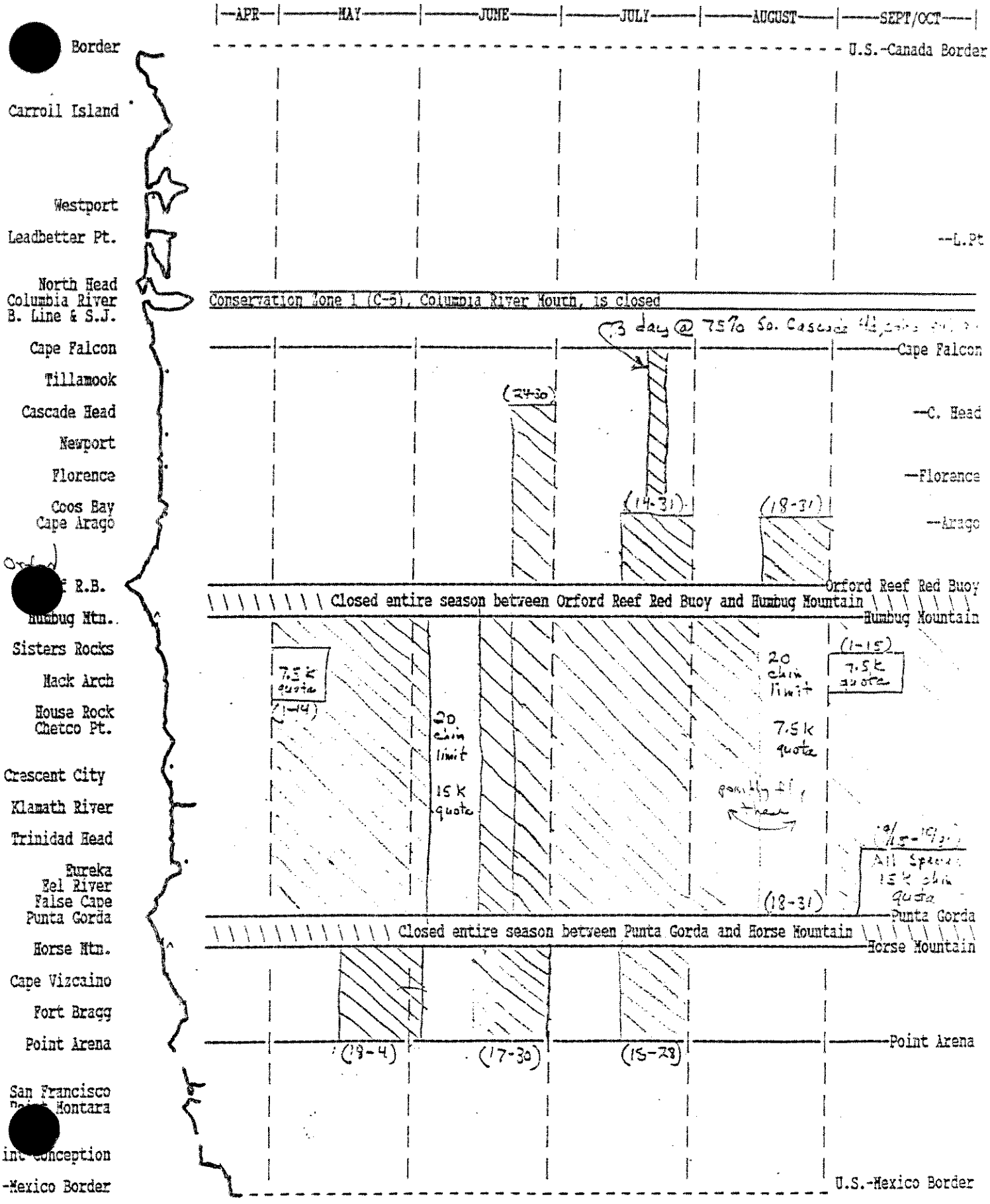
COMMENTS RE: 80,000 KMZ RECREATIONAL CHINOOK HARVEST GUIDELINE

The KMZ recreational fishery has a harvest guideline of 80,000 chinook. However, the impact analysis is based on an assumed KMZ recreational catch of only 28,900 chinook. Even though the recreational fishery per fish impact on Klamath fall chinook is approximately half that of the troll fishery, if the recreational fishery catches more than 28,900 chinook, the ocean impacts would be greater than modelled. The KMZ recreational fishery harvested 53,200 chinook in 1988. A catch of this magnitude in 1989 would lower inriver escapement below the levels that we have estimated for all options.

ATTACHMENT 5 7 April 4:45 p.m.

le __ . Troll Option __ proposed for 1989 ocean salmon fisheries.

A. SEASONS



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